

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the foregoing amendments and the following remarks.

Claim Status

Claims 1-19 are pending in the application. Claim 19 is added. Claims 11, 17-18 are amended. No new matter is added.

Restriction Requirement

A Restriction under 35 USC 121 and 371 is imposed against the claims of the instant application. Applicant respectfully traverses.

PCT Rule 13.2 states:

“Where a group of inventions is claimed in one and the same international application, the requirement of unity of invention referred to in **Rule 13.1** shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.”
[Emphasis Added]

Also see MPEP 1893.03(d).

In the instant claims, there is a 'technical relationship among those inventions [*i.e.*, Groups I-V] involving one or more of the same or corresponding special technical features.' In other words, the inventions [*i.e.*, Groups I-V] are 'so linked as to form a single general inventive concept.'

The technical relationship among the inventions [*i.e.*, Groups I-V] is based on a polyazole polymer being sulfonated. This is recited in each of the claims, especially see claims 1 and 15 where the sulfonated polyazole is formed by:

1. Mixing monomer with polyphosphoric acid (PPA)/sulfonating agent mixture, the monomers include a) "one or more aromatic tetraamino compounds with one or more aromatic carboxylic acids or esters thereof which contain at least two acid groups per carboxylic acid monomer," or b) "one or more aromatic and/or heteroaromatic diamino carboxylic acids." [In claim 15, at least one of the monomers is sulfonated.]
2. A layer of the mixture from the previous step is formed on a support or an electrode. [In claim 15, just the electrode.]
3. The layer is heated (a polycondensation reaction) to form the polyazole (*i.e.*, sulfonated polyazole).

4. Then treating the layer of the new polyazole layer (e.g., a hydrolysis reaction), so that the layer becomes "self-supporting."

Accordingly, each of the inventions [*i.e.*, Group I-V] is based upon the same "general inventive concept" or has the same "special technical feature."

Thus, all the claims are directed to the same material. Claim 1 is directed to a 'proton-conducting membrane of sulfonated polyazole.' Claim 15 is directed to an electrode provided with the sulfonated polyazole. Claim 16 is directed to a membrane electrode unit (MEU) with the membrane of claim 1. Claim 17 is the MEU with the membrane of claim 15. Claims 19 and 20 are the fuel cells made from the foregoing MEU's.

Therefore, since each of the inventions [*i.e.*, Groups I-V] is linked to the same general inventive concept [or same or corresponding technical feature], this restriction is improper and must be removed.

Applicant provisionally elects Group I (claims 1-14).

As for the species, Applicant likewise traverses.

As mentioned above, the monomers, either:

- a) "one or more aromatic tetraamino compounds with one or more aromatic carboxylic acids or esters thereof which contain at least two acid groups per carboxylic acid monomer," or
- b) "one or more aromatic and/or heteroaromatic diamino carboxylic acids,"

are mixed with a PPA/sulfonating agent. Please note these monomers when polycondensed form the recurring benzimidazole units. Thus, the logical species would be formula I of claim 11, since it can be made from monomers of either a) or b) above, and would therefore be generic to all claims.

Conclusion

In view of the foregoing, Applicant respectfully requests an early Notice of Allowance in this application.

Respectfully submitted,



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